

**Flood Control Project Maintenance
Levee Inspections**

Fall 2011 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

ST0007	Overall LMA Rating	Total LMA Miles				
Sacramento Maintenance Yard Putah Creek	M	16.29				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
<i>Earthen Levee</i>						
Vegetation	1.68		1.68	10.31%		
Trim / Thin Trees	0.04		0.04	0.25%		
Encroachments	0.19		0.19	1.17%	2.16	
Animal Control	0.06		0.06	0.37%		
Erosion / Bank Caving	0.02		0.02	0.12%		
<i>Supplemental</i>						
USACE Erosion Survey	0.02		0.02	0.12%		
<i>LMA Totals:</i>	2.01	0.00	2.01	12.34%	2.16	0.00

Unit No. 01 Putah Creek or North Levee LB	Overall Unit Rating	Total Unit Miles				
ST0007	M	8.99				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
<i>Earthen Levee</i>						
Vegetation	1.58		1.58	17.58%		
Encroachments	0.01		0.01	0.11%	1.77	
<i>Supplemental</i>						
USACE Erosion Survey	0.02		0.02	0.22%		
<i>Unit Totals:</i>	1.61	0.00	1.61	17.91%	1.77	0.00

Unit No. 02 Putah Creek or South Levee RB	Overall Unit Rating	Total Unit Miles				
ST0007	A	7.30				
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	Encroachments	
					PO Miles	CO Miles
<i>Earthen Levee</i>						
Vegetation	0.10		0.10	1.37%		
Trim / Thin Trees	0.04		0.04	0.55%		
Encroachments	0.18		0.18	2.47%	0.39	
Animal Control	0.06		0.06	0.82%		
Erosion / Bank Caving	0.02		0.02	0.27%		
<i>Unit Totals:</i>	0.40	0.00	0.40	5.48%	0.39	0.00

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2011 Levee Inspection Results

Sacramento Maintenance Yard Putah Creek

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)			M	

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2011 Levee Inspection Results

Sacramento Maintenance Yard Putah Creek

Waterway			Bank	Unit Miles
Unit No. 01 Putah Creek or North Levee			Left	8.99
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M	
Date of Inspection	3/22/2011 - 3/22/2011		10/18/2011 - 10/18/2011	
DWR Inspector	Herman Phillips		Herman Phillips	
Accompanied By			Casey Lund DWR	

Check one:

- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. We have found no changes in flood project conditions other than the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the enclosed report.
- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. In addition to the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the report, we have found the following changes in flood project conditions.

(In the comment section below or on additional sheet(s), identify change of condition by: Start to End Levee Mile or GPS coordinates, location (Land Side, Water Side, or Crown), Item identification, and description of the current condition).

Comments

One of the boxes above is to be checked by the Local Maintaining Agency (LMA). If the second box is checked, additional information must also be submitted. This Unit Cover Sheet should be signed and dated by the LMA Representative and returned to DWR with any additional sheets by September 30 (Summer Inspection) or March 31 (Winter Inspection). Please retain a copy for your records. Please mail all of this information to :

DWR Summer/Winter Inspection Reports
3310 El Camino Avenue, Suite 200
Sacramento, CA 95821-9000

X

Signature of LMA Representative

Date

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sacramento Maintenance Yard Putah Creek

Waterway							Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Putah Creek or North Levee							Left	8.99	10/18/2011 10/18/2011	Herman Phillips
LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
1	0.00	0.00	Earthen Levee	Vegetation	WS	A	Remove the wild growth other than native grasses from the levee slopes.	38.523535 ° -121.631515 °	38.523535 ° -121.631515 °	6 Y
2	0.00	0.00	Earthen Levee	Vegetation	LS	A	Remove the wild growth other than native grasses from the levee slopes.	38.523535 ° -121.631515 °	38.523535 ° -121.631515 °	10 Y
3	0.04	0.04	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2011: Old cobble site is unraveling, likely causing the toe of the bank to become unstable. [2011 Site ID: PUC_0-1_L]	38.523119 ° -121.631356 °	38.521968 ° -121.631519 °	11 Y
4	0.27	0.34	Earthen Levee	Encroachments	LS	PO	Landscaping	38.520305 ° -121.633168 °	38.520000 ° -121.634358 °	2
5	0.29	0.29	Earthen Levee	Encroachments	LS	PO	Buildings	38.520177 ° -121.633528 °	38.520177 ° -121.633530 °	3
6	0.35	0.64	Earthen Levee	Encroachments	LS	PO	Agricultural Ditch	38.520023 ° -121.634700 °	38.519599 ° -121.639832 °	7
7	0.59	1.26	Earthen Levee	Encroachments	LS	PO	Agricultural Ditch	38.519636 ° -121.639113 °	38.516417 ° -121.650665 °	18 Y
8	0.65	1.07	Earthen Levee	Vegetation	LS	M	Remove the wild growth other than native grasses from the levee slopes.	38.519593 ° -121.640036 °	38.517803 ° -121.647177 °	13 Y
9	1.38	2.54	Earthen Levee	Vegetation	LS	M	Remove the wild growth other than native grasses from the levee slopes.	38.515893 ° -121.652181 °	38.516548 ° -121.673000 °	1
10	2.11	2.17	Earthen Levee	Encroachments	WS	PO	Agricultural Ditch	38.515798 ° -121.666497 °	38.515863 ° -121.667445 °	9
11	2.18	2.22	Earthen Levee	Encroachments	WS	PO	Agricultural Ditch	38.515800 ° -121.666500 °	38.515860 ° -121.667345 °	8
12	3.09	3.09	Earthen Levee	Encroachments	LS	M	Debris	38.519185 ° -121.682397 °	38.519185 ° -121.682397 °	4
13	5.79	5.89	Earthen Levee	Encroachments	WS	PO	Crops	38.518305 ° -121.729815 °	38.518420 ° -121.731763 °	15
14	6.76	6.93	Earthen Levee	Encroachments	LS	PO	Fences	38.517635 ° -121.747220 °	38.517675 ° -121.750247 °	5
15	6.97	6.97	Supplemental	USACE Erosion Survey	WS	M	Inspector Comments: 2011: The toe to mid-bank is slumping. Large tree pop-outs have furthered the erosion. Slope is slightly steeper than 1:1. [2011 Site ID: PUC_7-2_L]	38.517362 ° -121.751778 °	38.517355 ° -121.752824 °	12 Y
16	7.03	7.07	Earthen Levee	Encroachments	LS	PO	Fences	38.517565 ° -121.751940 °	38.517600 ° -121.752697 °	17
17	8.50	8.82	Earthen Levee	Encroachments	LS	PO	Fences	38.521580 ° -121.777172 °	38.523932 ° -121.782100 °	20

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable PO : Partially Obstructing N : Not Inspected, see Inspector Comment C : Corrected
M : Minimally Acceptable CO : Completely Obstructing
U : Unacceptable W : Watch/Monitor

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sacramento Maintenance Yard Putah Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Putah Creek or North Levee	Left	8.99	10/18/2011 10/18/2011	Herman Phillips

Levee Mile Report Line	1
Start Levee Mile	0.00
End Levee Mile	0.00
Location	Water Side
Category	Earthen Levee
Item	Vegetation

Levee mile 0.00 Putah Creek Unit 1. Photo taken 10-18-2011.

phillips_f_20111018_021.jpg



Levee Mile Report Line	2
Start Levee Mile	0.00
End Levee Mile	0.00
Location	Land Side
Category	Earthen Levee
Item	Vegetation

Land side levee mile 0.00 looking downstream Putah Creek. Photo taken 10-18-2011.

phillips_f_20111018_022.jpg



Levee Mile Report Line	3
Start Levee Mile	0.04
End Levee Mile	0.04
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #1

USACE2011_PUC_0-1_L_1.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

PO : Partially Obstructing
CO : Completely Obstructing
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sacramento Maintenance Yard Putah Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Putah Creek or North Levee	Left	8.99	10/18/2011 10/18/2011	Herman Phillips

Levee Mile Report Line	3
Start Levee Mile	0.04
End Levee Mile	0.04
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #2

USACE2011_PUC_0-1_L_2.jpg



Levee Mile Report Line	7
Start Levee Mile	0.59
End Levee Mile	1.26
Location	Land Side
Category	Earthen Levee
Item	Encroachments

Agriculture Ditch within 10-foot of levee toe levee mile 0.59-1.26 land side Unit 1 Putah Creek. Photo taken 03-22-2011.

phillips_f_20110929_219.jpg



Levee Mile Report Line	8
Start Levee Mile	0.65
End Levee Mile	1.07
Location	Land Side
Category	Earthen Levee
Item	Vegetation

This ditch is located within the 10-foot easement and has been at this location for several years.

phillips_f_20110929_217.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

PO : Partially Obstructing
CO : Completely Obstructing
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sacramento Maintenance Yard Putah Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Putah Creek or North Levee	Left	8.99	10/18/2011 10/18/2011	Herman Phillips

Levee Mile Report Line	8
Start Levee Mile	0.65
End Levee Mile	1.07
Location	Land Side
Category	Earthen Levee
Item	Vegetation
Another view of ditch looking downstream landward.	
phillips_f_20110929_218.jpg	



Levee Mile Report Line	15
Start Levee Mile	6.97
End Levee Mile	6.97
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #1	
USACE2011_PUC_7-2_L_1.jpg	



Levee Mile Report Line	15
Start Levee Mile	6.97
End Levee Mile	6.97
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey
USACE 2011 Photo #2	
USACE2011_PUC_7-2_L_2.jpg	



* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	PO : Partially Obstructing CO : Completely Obstructing W : Watch/Monitor	N : Not Inspected, see Inspector Comment C : Corrected
--	--	--	---

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2011 Levee Inspection Results

Sacramento Maintenance Yard Putah Creek

Waterway			Bank	Unit Miles
Unit No. 02 Putah Creek or South Levee			Right	7.30
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	3/22/2011 - 3/22/2011		10/18/2011 - 10/18/2011	
DWR Inspector	Herman Phillips		Herman Phillips	
Accompanied By			Casey Lund	

Check one:

- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. We have found no changes in flood project conditions other than the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the enclosed report.
- ☐ During the current winter (or summer) inspection period, my staff or I have inspected the levee and associated flood project components identified in the attached Levee Inspection Report by Mile. In addition to the results of our normal maintenance and the corrections we have made to maintenance deficiencies identified in the report, we have found the following changes in flood project conditions.

(In the comment section below or on additional sheet(s), identify change of condition by: Start to End Levee Mile or GPS coordinates, location (Land Side, Water Side, or Crown), Item identification, and description of the current condition).

Comments

One of the boxes above is to be checked by the Local Maintaining Agency (LMA). If the second box is checked, additional information must also be submitted. This Unit Cover Sheet should be signed and dated by the LMA Representative and returned to DWR with any additional sheets by September 30 (Summer Inspection) or March 31 (Winter Inspection). Please retain a copy for your records. Please mail all of this information to :

DWR Summer/Winter Inspection Reports
3310 El Camino Avenue, Suite 200
Sacramento, CA 95821-9000

X

Signature of LMA Representative

Date

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sacramento Maintenance Yard Putah Creek

Waterway						Bank	Unit Miles	Inspection Start/End	Inspector	
Unit No. 02 Putah Creek or South Levee						Right	7.30	10/18/2011 10/18/2011	Herman Phillips	
LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
1	0.00	0.00	Earthen Levee	Vegetation	LS	A	Remove the wild growth other than native grasses from the levee slopes.	38.504635 ° -121.784083 °	38.504635 ° -121.784083 °	10 Y
2	0.17	0.31	Earthen Levee	Encroachments	LS	PO	Agricultural Ditch	38.507113 ° -121.662687 °	38.508968 ° -121.663432 °	3
3	0.20	0.30	Earthen Levee	Encroachments	WS	PO	Agricultural Ditch	38.507410 ° -121.662727 °	38.508775 ° -121.663228 °	26
4	0.21	0.30	Earthen Levee	Encroachments	WS	PO	Agricultural Ditch	38.507598 ° -121.662815 °	38.508835 ° -121.663212 °	1
5	1.09	1.10	Earthen Levee	Erosion / Bank Caving	WS	M	Note and monitor erosion site. Inspector Comments: This location erosion site has been partially repaired by the land owner however there is some controversial issues here between the Maintenance yard and owner as to who is responsible for repairs. PICTURES and a report has been taken on this site.	38.511645 ° -121.676747 °	38.511612 ° -121.676770 °	27 Y
6	2.10	2.13	Earthen Levee	Animal Control	LS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	38.515348 ° -121.694042 °	38.515398 ° -121.694590 °	22
7	2.10	2.13	Earthen Levee	Animal Control	WS	M	No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	38.515350 ° -121.694110 °	38.515385 ° -121.694558 °	23
8	6.42	6.42	Earthen Levee	Erosion / Bank Caving	LS	M	Note and monitor erosion site.	38.517417 ° -121.769950 °	38.517417 ° -121.769953 °	28
9	6.59	6.65	Earthen Levee	Encroachments	WS	PO	Crops	38.518088 ° -121.772947 °	38.518353 ° -121.773935 °	6
10	6.68	6.86	Earthen Levee	Encroachments	LS	M	Material	38.518404 ° -121.774158 °	38.519938 ° -121.776952 °	11
11	6.83	6.86	Earthen Levee	Trim / Thin Trees	WS	M	Trim trees to at least five feet above ground level.	38.519474 ° -121.776414 °	38.519938 ° -121.776951 °	12
12	6.95	7.01	Earthen Levee	Vegetation	WS	M	Elderberries are blocking visibility and flood fight capability.	38.520620 ° -121.778278 °	38.521136 ° -121.779077 °	13
13	7.03	7.04	Earthen Levee	Vegetation	WS	M	Elderberries are blocking visibility and flood fight capability.	38.521298 ° -121.779452 °	38.521327 ° -121.779505 °	2
14	7.05	7.07	Earthen Levee	Vegetation	WS	M	Elderberries are blocking visibility and flood fight capability.	38.521433 ° -121.779715 °	38.521605 ° -121.780055 °	4
15	7.16	7.16	Earthen Levee	Trim / Thin Trees	WS	M	Trim trees to at least five feet above ground level.	38.522242 ° -121.781460 °	38.522242 ° -121.781463 °	32
16	7.17	7.18	Earthen Levee	Vegetation	WS	M	Elderberries are blocking visibility and flood fight capability.	38.522327 ° -121.781477 °	38.522408 ° -121.781638 °	5

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable PO : Partially Obstructing N : Not Inspected, see Inspector Comment C : Corrected
M : Minimally Acceptable CO : Completely Obstructing
U : Unacceptable W : Watch/Monitor

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sacramento Maintenance Yard Putah Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Putah Creek or South Levee	Right	7.30	10/18/2011 10/18/2011	Herman Phillips

Levee Mile Report Line	1
Start Levee Mile	0.00
End Levee Mile	0.00
Location	Land Side
Category	Earthen Levee
Item	Vegetation
Levee mile 0.00 Unit 2 Putah Creek looking downstream. Photo taken 10-18-2011.	
phillips_f_20111018_023.jpg	



Levee Mile Report Line	5
Start Levee Mile	1.09
End Levee Mile	1.10
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving
Photo shows partial repair of slope damage.	
phillips_f_20110929_220.jpg	



Levee Mile Report Line	5
Start Levee Mile	1.09
End Levee Mile	1.10
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving
slope damage some repairs made. Proper repair need to be done at this site with compaction test to verify compaction.	
phillips_f_20110929_221.jpg	

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

PO : Partially Obstructing
CO : Completely Obstructing
W : Watch/Monitor

N : Not Inspected, see Inspector Comment C : Corrected

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2011

Sacramento Maintenance Yard Putah Creek

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Putah Creek or South Levee	Right	7.30	10/18/2011 10/18/2011	Herman Phillips

Levee Mile Report Line	5
Start Levee Mile	1.09
End Levee Mile	1.10
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving
Another view standing on toe of slope looking upstream.	
phillips_f_20110929_222.jpg	

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable PO : Partially Obstructing N : Not Inspected, see Inspector Comment C : Corrected
M : Minimally Acceptable CO : Completely Obstructing
U : Unacceptable W : Watch/Monitor